

**U.S. Department of Agriculture, Agricultural Research Service
Systematic Mycology and Microbiology Laboratory - Nomenclature Fact Sheets**

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Ceratocystis paradoxa* and *Thielaviopsis thielavioides

This nomenclature report is based primarily on Paulin-Mahady et al. (2002), with reference also to Nag Raj & Kendrick (1975). Paulin-Mahady et al. (2002) consider the currently accepted name for *Chalara paradoxa* to be *Thielaviopsis paradoxa* (De Seynes) Höhn. 1904. Due to the similarity of the names, there is some potential for confusion with *Chalara thielavioides* (Peyronel) Nag Raj & Kendr. 1975; this is not considered to be a synonym of *Thielaviopsis paradoxa* (De Seynes) Höhn. 1904. Paulin-Mahady et al. (2002) transferred *C. thielavioides* to the new genus *Thielaviopsis* as *Thielaviopsis thielavioides* (Peyr.) A.E. Paulin, T.C. Harr. & McNew 2002 (see nomenclature reports below).

***Ceratocystis paradoxa* (Dade) C. Moreau 1952 (Ascomycetes, Microascales)**

≡ *Ceratostomella paradoxa* Dade 1928

≡ *Endoconidiophora paradoxa* (De Seynes) R.W. Davidson 1935

≡ *Ophiostoma paradoxum* (Dade) Nannf. 1934

= *Ceratocystis musarum* Riedl 1962

Alternate State (Anamorph): *Thielaviopsis paradoxa* (De Seynes) Höhn.

Distribution: Cosmopolitan.

Substrate: Fruits, leaves.

Disease Note: Leaf and fruit rot.

Host: *Ananas* (Bromeliaceae), *Cocos* spp., *Elaeis* spp. (Arecaceae), *Ipomoea* spp. (Convolvulaceae), *Musa* spp. (Musaceae), *Theobroma* spp. (Malvaceae), and other plant families.

Internal Note: IF lists %*Neocarpenteles acanthosporum*% (Udagawa & Takada) Udagawa & Uchiy. 2002 as a synonym, but it is a teleomorph of %*Aspergillus acanthosporus*% (Udagawa and Uchiyama in Mycoscience 2002 43:3-6). IF lists %*Thielaviopsis thielavioides* (Peyr.) Paulin et al. 2002 as a synonym, but this is not substantiated (reference on CPC website by Kowalska B. 2003 appears to be an error).

Verified By: Erica On Jun 01, 2005

***Thielaviopsis paradoxa* (De Seynes) Höhn. 1904**

≡ *Sporoschisma paradoxum* De Seynes 1886

≡ *Chalara paradoxa* (De Seynes) Sacc. 1892

= *Stilbochalara dimorpha* Ferd. & Winge 1910

= *Thielaviopsis ethacetica* Went 1893

Variant spelling *Thielaviopsis ethaceticum* Went 1893

= *Endoconidium fragrans* Delacr. 1893

Alternate State (Teleomorph): *Ceratocystis paradoxa* (Dade) C. Moreau

Notes: Type of *Thielaviopsis* Went 1893 (emend. Paulin, Harrington & McNew).

Distribution: Cosmopolitan.

Substrate: Fruits, leaves.

Disease Note: Fruit and leaf rot.

Host: *Ananas* (Bromeliaceae), *Cocos* spp., *Elaeis* spp. (Arecaceae), *Ipomoea* spp. (Convolvulaceae), *Musa* spp. (Musaceae), *Theobroma* spp. (Malvaceae), and other plant families.

Internal Note: Nag Raj & Kendrick 1975 list *Hughesiella euricoi* Bat. & A.F. Vital 1956 as a taxonomic synonym but it is not included by Paulin-Mahady et al. 2002.

Supporting Literature:

Nag Raj, T.R., and Kendrick, B. 1975. A Monograph of *Chalara* and Allied Genera. Wilfrid Laurier University Press, Ontario, Canada, 200 pages.

Paulin-Mahady, A.E., Harrington, T.C., and McNew, D.L. 2002. Phylogenetic and taxonomic evaluation of *Chalara*, *Chalaropsis*, and *Thielaviopsis* anamorphs associated with *Ceratocystis*. Mycologia 94: 62-72.

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Thielaviopsis thielavioides (Peyronel) A.E. Paulin, T.C. Harr. & McNew 2002 (Ascomycetes, Microascales)

≡ *Chalaropsis thielavioides* Peyronel 1916

≡ *Chalara thielavioides* (Peyronel) Nag Raj & W.B. Kendr. 1975

≡ *Chalaropsis thielavioides* var. *thielavioides* Peyronel 1916

= *Chalaropsis thielavioides* var. *ramosissima* Sugiy. 1968 Note: Considered by Paulin-Mahady et al. 2002 to be indistinct from *T. thielavioides*.

Notes: Closely related to *T. ovoidea* and *T. populi* based on ITS homology.

Distribution: South America (Brazil), North America, Europe, Australia, Malaysia, Indonesia.

Substrate: Roots.

Disease Note: Root rot.

Host: Various plant families.

Supporting Literature:

Boerema, G.H., Pieters, R., and Hamers, M.E.C. 1993. Check-list for scientific names of common parasitic fungi. Supplement Series 2c,d (additions and corrections): Fungi on field crops: pulse (legumes), forage crops (herbage legumes), vegetables and cruciferous crops. Netherlands J. Pl. Pathol. 99 Suppl.: 1-32.

Paulin-Mahady, A.E., Harrington, T.C., and McNew, D.L. 2002. Phylogenetic and taxonomic evaluation of *Chalara*, *Chalaropsis*, and *Thielaviopsis* anamorphs associated with *Ceratocystis*. Mycologia 94: 62-72.

Verified By: Erica On Jun 01, 2005

Additional literature

Udagawa, S.-i., and Uchiyama, S. 2002. *Neocarpenteles*: a new ascomycete genus to accommodate *Hemicarpenteles acanthosporus*. Mycoscience 43 : 3-6

Written by Erica Cline on 6/13/2005.